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8 UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
9 AT SEATTLE

10 AEROTEL LTD., et al.,

11 Plaintiffs,

12 v.

13 T-MOBILE USA, INC.,

14 Defendant.
15

CASE NO. C07-1957JLR

ORDER ON CLAIM
CONSTRUCTION

16 **I. INTRODUCTION**

17 Plaintiffs Aerotel, LTD, Aerotel USA, Inc, and Aerotel USA, LLC (collectively
18 “Aerotel”) sued T-Mobile USA, Inc. (“T-Mobile”) for infringement of United States
19 Patent No. 4,706,275 (the “‘275 Patent”). The ‘275 Patent is a 1985 patent that involves
20 prepaid telephone calls.
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II. BACKGROUND

A. The ‘275 Patent

Aerotel owns the rights to the ‘275 Patent for a “Telephone System” invented by an Israeli citizen, Svi Kamil. (Ex. 1¹ (‘275 Patent) at 1.) The patent was issued in 1985 and describes a method for making prepaid telephone calls using a special code and credit information that is stored in a special exchange (*i.e.*, calling cards). Under the heading “Field of Invention,” the ‘275 Patent explains that “[t]his invention is concerned with telephone systems and more particularly with telephone systems wherein when a prepayment is in force the prepaid party can use any telephone for completing telephone calls including toll calls.” (*Id.* at 1:5-10.) The background concludes with the statement: “Thus there is a long felt need for a system which enables making telephone calls including local or toll calls conveniently, inexpensively and from any telephone.” (*Id.* at 1:54-59.) The conclusion also notes that the calling party should be able to accomplish a call from “the nearest available telephone.” (*Id.*)

The ‘275 Patent achieves the ability for a prepaid calling party to make a call utilizing both a “special exchange” and a “special code.” Generally speaking, the technology permits a calling party to deposit money with a company who then stores the available amount in the “special exchange” (*i.e.*, a computer with software for storing data and a call router for putting the call through). The calling party is given a special code to access his or her stored balance, as well as the number to dial into the special

¹ Unless noted otherwise, all references to exhibits are to those attached to the Joint Claim Chart (Dkt. # 30).

1 exchange. The patent also teaches that if the calling party wishes to make more than one
2 call during a session he or she must input another code which disconnects the current call
3 and gives the calling party a new dial tone to make additional calls.

4 The '275 Patent expired in November 2005. (Compl. (Dkt. # 1) ¶ 13.) Aerotel
5 claims that T-Mobile infringed the '275 Patent by selling certain telecommunication
6 products between 2001 and 2004. (*Id.* ¶ 14.) These products include prepaid wireless
7 refill cards and prepaid telephone service using a wireless telephone. (*Id.*) The alleged
8 infringing T-Mobile products include the "EasySpeak" and "T-Mobile To Go," both of
9 which appear to be prepaid cellular telephone systems.

10 In December 2004, Aerotel brought a similar claim against other
11 telecommunication providers in the Southern District of New York. *See Aerotel, Ltd., v.*
12 *Primus Telecomm. Group*, 04-CV-10292-RJH-FM (Dkt. # 1) (S.D.N.Y. December 29,
13 2004) ("the New York action"). The New York action involves nearly the same claim
14 terms as the instant case but also includes a request for claim construction of Claim 1 of
15 the '275 Patent, which is not at issue here. The New York action was filed three years
16 before the instant case. In the interest of judicial economy, this court stayed this case in
17 November 2008 to allow the Honorable Richard J. Holwell time to rule on claim
18 construction in the New York case. (Dkt. # 51.) Judge Holwell held a two-day Markman
19 hearing in the New York case on November 12-13, 2008, but has yet to issue an order on
20 claim construction. Accordingly, this court lifted its stay and held its Markman hearing
21 on October 9, 2009.
22

1 **B. Prosecution History of the ‘275 Patent**

2 The ‘275 Patent was filed on November 13, 1985, and issued to Aerotel in
 3 November 1987. (Ex. 1.) Since it was issued there have two consolidated
 4 reexaminations. The first reexamination was a consolidation of three separate requests
 5 by third parties to reexamine the ‘275 Patent and was issued just a year before the patent
 6 expired. (‘275 Patent April 8, 2003, Reexamination Cert.) The second reexamination
 7 arose from two third-party requests and resulted in the issuance of a second
 8 Reexamination Certificate on June 27, 2006, *after* the ‘275 Patent expired. (*Id.* June 27,
 9 2006, Reexamination Cert.) Both reexamination proceedings resulted in the examiner
 10 issuing Reexamination Certificates affirming the patentability of Claims 1-23 without
 11 requiring the patent holder to make any amendments.

12 **III. ANALYSIS**

13 **A. Law of Claim Construction**

14 The court has the sole responsibility for construing patent claims. *Markman v.*
 15 *Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). Subsequent authority has clarified
 16 that the court construes claims purely as a matter of law. *Cybor Corp. v. FAS Tech., Inc.*,
 17 138 F.3d 1448, 1456 (Fed. Cir. 1998) (applying de novo review to all claim construction
 18 issues, even “allegedly fact-based questions”). In practice, executing the Markman
 19 mandate means following rules that rank the importance of various sources of evidence
 20 of the “true” meaning of claim terms. The Federal Circuit summarized its view of the
 21 claim construction rules in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en
 22

1 | banc). Although *Phillips* focused on the role of dictionaries in claim construction, the
2 | case also provides a good overview of the claim construction process.

3 | Intrinsic evidence, which includes the patent and its prosecution history, is the
4 | primary source from which to derive a claim's meaning. *Id.* at 1314. The court's task is
5 | to determine the "ordinary and customary meaning" of the terms of a claim in the eyes of
6 | a person of ordinary skill in the art on the filing date of the patent. *Id.* at 1313 (quoting
7 | *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). In its review
8 | of intrinsic evidence, the court should begin with the language of both the asserted claim
9 | and other claims in the patent. *Id.* at 1314; *see also Innova/Pure Water, Inc. v. Safari*
10 | *Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004) ("[C]laim construction
11 | analysis must begin and remain centered on the claim language itself.").

12 | The court must read claim language, however, in light of the remainder of the
13 | patent's specification. *Phillips*, 415 F.3d at 1316 ("[T]he specification necessarily
14 | informs the proper construction of the claims."). The specification acts as a
15 | "concordance" for claim terms, and is thus the best source beyond claim language for
16 | understanding claim terms. *Id.* at 1315. The inventor is free to use the specification to
17 | define claim terms as he or she wishes, and the court must defer to the inventor's
18 | definitions. *Id.* at 1316 ("[T]he inventor's lexicography governs."). The court should
19 | "rely heavily" on the specification in interpreting claim terms. *Id.* at 1317. The court
20 | should not, however, commit the "cardinal sin" of claim construction – reading
21 | limitations from the specification into the claims. *Id.* at 1320 (citing *SciMed Life Sys. v.*
22 | *Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001). Although a

1 court should limit the meaning of a claim where the “specification makes clear that the
2 invention does not include a particular feature,” the court must not read “particular
3 embodiments and examples appearing in the specification” into the claims unless the
4 specification requires it. *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571
5 (Fed. Cir. 1988).

6 Although the patent’s prosecution history is also intrinsic evidence, it is “less
7 useful for claim construction purposes.” *Id.* at 1317. As the prosecution history
8 documents an invention’s evolution from application to the issuance of the patent, it
9 usually “lacks the clarity of the specification.” *Id.* The prosecution history is useful,
10 however, in determining when an inventor has expressly disavowed certain
11 interpretations of his or her claim language. *Id.* Finally, the court, at its discretion, may
12 consider the less reliable extrinsic evidence, “including expert and inventor testimony,
13 dictionaries, and learned treatises.” *Id.* at 1317-1319 (citing *Markman*, 52 F.3d at 980).

14 As the *Phillips* court put it, the “inquiry into how a person of ordinary skill in the
15 art understands a claim term provides an objective baseline from which to begin claim
16 interpretation.” 415 F.3d at 1314. In this inquiry, however, the court can only rely on
17 dictionaries or on expert testimony from a person of skill in the art when no answers are
18 apparent from the intrinsic evidence. Following *Phillips*, the starting point for claim
19 construction is the “widely accepted meaning of commonly understood words.” *Id.* The
20 court finds in this case that it need go no further than the claim language and the
21 prosecution history. Aside from a few dictionary references, the court declines to
22 consider other extrinsic evidence in conducting its claim construction analysis. Finally,

1 the court attempts to construe the terms as they were used on the effective date of the
2 '275 Patent and not as those terms may be understood in 2009. *See Phillips*, 415 F.3d at
3 1313 ("We have made clear, moreover, that the ordinary and customary meaning of a
4 claim term is the meaning that the term would have to a person of ordinary skill in the art
5 in question *at the time of the invention*").

6 **B. Claim 23**

7 Claim 23 of the '275 Patent provides for a method for making pre-paid telephone
8 calls comprising:

9 (a) issuing a valid special code to a calling party when a prepayment
amount is deposited to the credit of said calling party;

10 (b) storing the prepayment amount in a memory in a special exchange;

11 (c) dialing said special exchange when the calling party wishes to make a
12 telephone call to a called party;

13 (d) inputting a special code and the number of the called party;

14 (e) connecting the calling party to the called party only if the special code
15 inputted by the calling party is a valid special code, and in addition, only if
the current initial prepayment amount in the memory exceeds the minimum
cost of a call to the inputted number;

16 (f) monitoring the running cost of the call in accordance with duration;

17 (g) disconnecting the calling party from the called party when the calling
18 party hangs up, or when the running cost of the call exceeds the current
initial prepayment amount, whichever occurs first; and

19 (h) deducting from the initial prepayment amount the running cost of the
20 call.

1 The parties ask the court to construe nine terms or, more accurately, phrases
2 contained in Claim 23: (1) special code; (2) prepayment amount; (3) special exchange;
3 (4) dialing said special exchange; (5) inputting a special code and the number of the
4 called party; (6) connecting the calling party to the called party only if the special code
5 inputted by the calling party is a valid special code; (7) current initial prepayment
6 amount; (8) monitoring the running cost of the call; and (9) deducting from the initial
7 prepayment amount the running cost of the call. (*See generally* Joint Claim Chart.) The
8 court considers the terms in a more logical order as detailed below and combines the
9 construction of terms (2) and (7).

10 **C. Special Exchange**

11 The term “special exchange” is used throughout the ‘275 Patent and normally
12 should be given the same definition. *See Phillips*, 415 F.3d at 1314 (citing *Rexnord*
13 *Crop. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001)). Aerotel proposes that the
14 term be defined “from the point of view of the calling telephone, behind the exchange or
15 equipment that initially receives the call. The special exchange includes a telephone call
16 router (which may be a switch), computers and memory having software for verifying
17 that the stored credit is sufficient to connect and continue a call.” T-Mobile seeks to add
18 the limitation of “any available telephone” to the definition of “special exchange” and
19 thus offers the following construction: “The ‘special exchange’ consists of a telephone
20 router, computer and memory, is separate from and behind the local exchange, and can be
21 reached for the purpose of making prepaid telephone calls by dialing its telephone
22 number from any available telephone.” The parties generally agree that the special

1 exchange is a computer that consists of a telephone router and memory capable of storing
2 the credit and verifying the calling party's credit. The dispute centers primarily on T-
3 Mobile's limitation that the special exchange be reached by dialing its telephone number
4 from "any available telephone."

5 The term "special exchange" is not defined in the specifications of the '275 Patent.
6 Nor does the court find it a term of art that a person skilled in the art would be able to
7 define. The court therefore looks to the patent specifications and the prosecution history
8 to define the term.

9 The court begins its analysis with the Federal Circuit's guidance in *Phillips*. That
10 is, claim terms should normally be interpreted to mean the same thing. *Phillips*, 415 F.3d
11 at 1314 (citations omitted) ("[b]ecause claim terms are normally used consistently
12 throughout the patent, the usage of a term in one claim can often illuminate the meaning
13 of the same term in other claims"). The preamble to Claim 1 of the '275 Patent provides
14 for a "unique method for making telephone calls from any available telephone," while the
15 preamble for Claim 23 only provides for a "method for making telephone calls"
16 Both Claim 1 and Claim 23 use the term "special exchange." (*See* Claim 1(b), (c) and
17 Claim 23(b), (c).) Both claims require that the calling party dial "said special exchange"
18 when the calling party wishes to make a call. While the court is not asked to define
19 "special exchange" as used in Claim 1, there does not seem to be any dispute that Claim 1
20 requires that the special exchange be reachable from "any available telephone." Because
21 the court reads the term special exchange to mean the same in Claim 1 as it is used in
22 Claim 23, the court is satisfied that after considering the plain language, the patent

1 specifications, and the prosecution history, the limitation of “any available telephone”
2 applies to the term “special exchange,” as used throughout the patent.

3 1. Patent Specifications

4 The ‘275 Patent specifications support T-Mobile’s limitation that the special
5 exchange is reachable by “any available telephone.” For example, column 1, lines 53-57
6 of the patent explains that “there is a long felt need for a system which enables making
7 telephone calls including local or toll calls conveniently, inexpensively and from any
8 telephone.” (‘275 Patent at 1:53-57.) “Thus if a party wants to make a call, be it a local
9 call or a long distance national or international call, he should be able to accomplish the
10 call from the nearest available telephone.” (*Id.* at 1:57-60.) Furthermore, in the
11 background section, the patent states that “the acquiring party wishes to make a telephone
12 call which may be a local call or a toll call. He uses the nearest available telephone,
13 removes the handset and dials a special central office” (*Id.* at 3:18-21.) Finally, in
14 the general description of what is claimed, the patent concludes with “[a] system is thus
15 provided that benefits travelers and others having the need for the available [sic] of
16 telephone service form [sic] any telephone.” (*Id.* at 6:35-39.) Thus, the plain language of
17 the ‘275 Patent supports the notion that the claimed invention requires that the “special
18 exchange” be reached from “any available telephone.”

19 2. Prosecution History

20 The prosecution history also supports T-Mobile’s limitation. For example, during
21 the reexamination process, wherein the patent examiner initially rejected, *inter alia*,
22 Claims 1 and 23 in light of the prior art, Aerotel attempted to distinguish its patent by

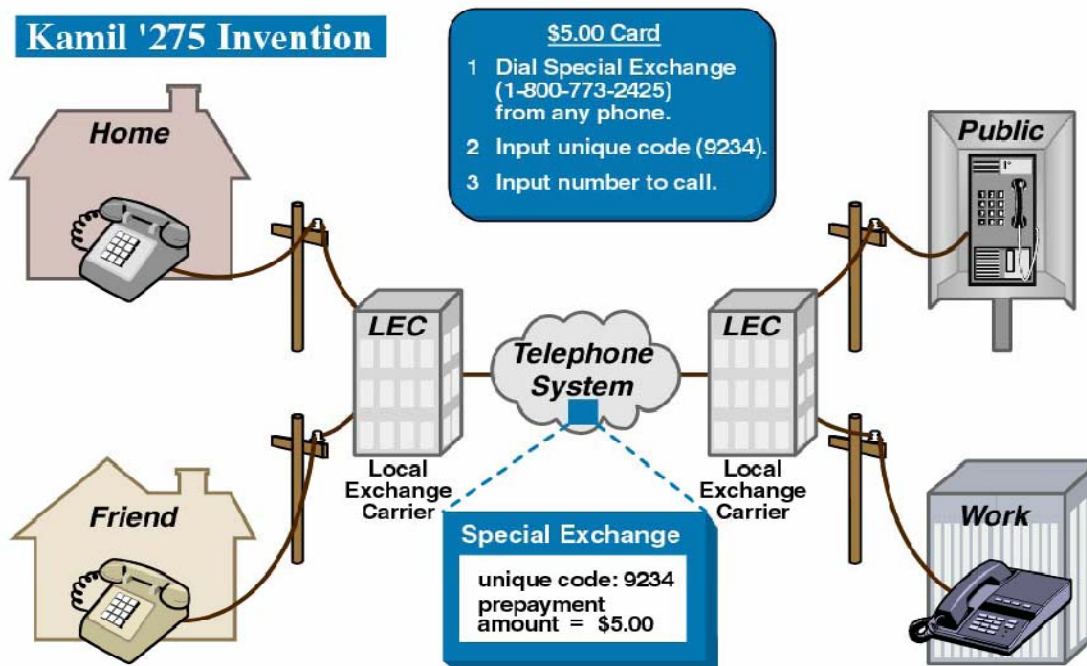
1 arguing that none of the prior art contemplated that the special exchange could be reached
2 from any available telephone. (*See* T-Mobile’s Ex. G (Aerotel’s Reply to the February 4,
3 2002 Reexamination at 7) (“The point is that the special exchange (or any one of a
4 plurality of special exchanges) could be reached from any available telephone (non-
5 location-specific) by dialing its number.”) & (Reply at 8) (“[T]he special exchange may
6 be accessed from ‘any available telephone’ There is more than ample support in the
7 specification for this interpretation. For example, [providing statements from the
8 “Background of the Invention” and “General Description” sections of the ‘275 Patent, as
9 quoted above] . . . Thus, Patent Owner’s interpretation is fully supported.”) & (*id.*) (“[I]f
10 the special exchange were not located ‘behind a local exchange,’ it could not be dialed
11 from the nearest available telephone, but only from telephones supervised by the special
12 exchange itself.”).

13 The court is satisfied that for Aerotel to survive the reexamination process it was
14 necessary for it to argue that the special exchange could be reached from any available
15 telephone in order to overcome the prior art. Accordingly, the court finds that this
16 limitation necessarily narrowed the scope of the otherwise broad language found in Claim
17 23. *See Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1372-373 (Fed. Cir. 2005)
18 (“Where an applicant argues that a claim possesses a feature that the prior art does not
19 possess in order to overcome a prior art rejection, the argument may serve to narrow the
20 scope of otherwise broad claim language.”).

21 The court considered that Aerotel’s reply to the patent examiner’s early rejection
22 of Claims 1 and 23 suggested in some places that Claim 1 contained the limitation of

1 “any available telephone” but Claim 23 did not. For example, when Aerotel attempted to
2 distinguish the “Moller” patent it stated that “Moller does not show or suggest using ‘any
3 available telephone’ and Claims 1 and 9 of the ‘275 Patent require that calls be made
4 from ‘any available telephone.’” (Ex. G at 11.) In this section Aerotel discussed Claims
5 1, 9, and 23, but specifically excluded Claim 23 from the limitation that it is from any
6 available telephone. This example of Aerotel distinguishing Claim 1 from Claim 23 does
7 not change the court’s construction, however. Although the court acknowledges that
8 there are scattered references to Claims 1 and 9 that at the same time exclude Claim 23,
9 the vast majority of the prosecution history ties the three claims together and
10 distinguishes them from the prior art based primarily on the “reachable from any
11 available phone” limitation. For example, the very next prior art discussion after Moller
12 in Aerotel’s reply relating to Claims 1 and 23 is “Mearns ‘377”. In distinguishing
13 Mearns ‘377, Aerotel notes – without limiting the discussion to Claim 1 – that Mearns
14 ‘377 is distinguishable because “there is no disclosure within the four corners of Mearns
15 ‘377 with regard to whether or not it could be used from any available telephone, and the
16 Examiner has not cited any references to show that the Mearns ‘377 system could be used
17 from any available telephone.” (Ex. G. at 13.)

18 In a PowerPoint slide presented by Aerotel to the examiner in 2001, Aerotel
19 explained that the special exchange is dialed from “any phone.” (Ex. B at AER208497.)
20 Each slide conveys the message that the special exchange can be reached from “any
21 phone.” The example depicted below is indicative of the slides in Aerotel’s presentation:
22



This slide, as well as the other slides, supports the argument that during the reexamination process Aerotel distinguished its invention from the prior art by noting that none of the prior art taught that the special exchange could be reached from “any available telephone.” It was this limitation that the examiner relied on in reaching the conclusion to allow Claims 1, 9 and 23 and in granting the reexamination certificate.

After Aerotel’s written reply and presentation to the examiner, the examiner issued a “Notice of Intent to Issue Reexamination Certificate” (“Notice”), allowing the three claims in dispute. (Ex. H at 1.) In the first statement of reason, the examiner noted that the reason for patentability was that “[t]he prior art of record fails to teach a unique method for making telephone calls from *any available telephone*.” (*Id.* (emphasis in original).) In fact, the examiner relies on the “any available telephone” limitation throughout the Notice and each time this limitation is discussed the examiner italicizes

1 the phrase. More importantly, the examiner did not distinguish any of the claims when
2 discussing the limitation that eventually led to patentability: that the special exchange is
3 reachable from any available telephone. The court therefore construes “special
4 exchange,” as used in Claim 23, to consist of a telephone router, computer, and memory
5 that is behind the exchange and can be reached from any available telephone.

6 **D. Dialing Said Special Exchange**

7 The parties request that the court construe the term “dialing said special exchange”
8 which is found in Claim 23(c) of the ‘275 Patent. Aerotel proposes the following
9 definition: “‘Dialing’ means to send a signal representing a number. ‘Dialing said special
10 exchange’ means to send a signal representing a number to cause communication with
11 the special exchange.” T-Mobile contends that dialing said special exchange “means the
12 user enters the telephone number of the special exchange on a touchtone or rotary
13 telephone in order to make a prepaid telephone call to a called party.”

14 This dispute essentially depends on the court’s construction of what it means “to
15 dial” as used in the ‘275 Patent. The court finds that Aerotel seeks to divorce “dialing”
16 from “entering a number” and instead would define dialing as simply “sending a signal.”
17 Alternatively, T-Mobile’s definition requires that the number be physically “entered” to
18 complete the act of dialing. The court finds T-Mobile’s interpretation the more
19 defensible of the two.

20 To support its definition of “dialing,” Aerotel points to the fact that the special
21 exchange contains a router that stores the number received from the calling party and
22 directs the redialer to dial the number after the call has been verified. (Aerotel Opening

1 Br. at 15.) The redialer, according to Aerotel, does not physically enter numbers on a
2 keypad but rather sends a signal corresponding to a number stored on the special
3 exchange register. Thus, according to Aerotel, “nothing in the claim requires that the
4 user enters the telephone number of the special exchange.” (*Id.* at 16.) T-Mobile, on the
5 other hand, requests that “dialing” be given its plain meaning.

6 The court finds that Aerotel’s interpretation of dialing conflates two steps in the
7 ‘275 Patent: (1) dialing the special exchange, and (2) the router in the special exchange
8 dialing the number of the called party. Claim 23(c) requires that the calling party dial the
9 special exchange when the calling party wishes to make a telephone call to a called party.
10 This act of “dialing” requires that the keypad of a touchtone phone or the dial of a rotary
11 phone be utilized while the router redials the number that was stored when the calling
12 party initially called the special exchange and inputted the special code and the number
13 for the called party.

14 The use of “dialing” the special exchange is prevalent throughout the ‘275 Patent,
15 as well as in the prosecution history. For example, the ‘275 Patent provides that “the
16 acquiring party wishes to make a telephone call which may be a local call or a toll call.
17 He uses the nearest available telephone, *removes the handset* and *dials* a special central
18 office” (‘275 Patent at 3:20-25 (emphasis added).) Aerotel, in the reexamination
19 process argued: “[t]he point is that the special exchange (or any one of a plurality of
20 special exchanges) could be reached from any available telephone (non-location-specific)
21 by dialing its number.” (Ex. G at 7.) Aerotel further claimed that the special exchange
22 “is reached by dialing a telephone number on the regular public switched telephone

1 network behind the local exchange. Thus, after a customer makes a prepayment, “[t]he
2 customer acquires a special code, a credit amount, and the telephone number of the
3 special central offices [sic]’ (column 3, lines 3-5).” *Id.*

4 Based on the plain meaning of “dialing” on a telephone, as well as the ‘275 Patent
5 specifications and the prosecution history, the court adopts the following construction:
6 the term “dialing said special exchange” means the user enters the telephone number of
7 the special exchange by dialing the number on a telephone. The court rejects the
8 argument that “dialing” means simply to send a signal.

9 **E. Special Code**

10 Next, the parties seek construction of the term “special code” which is used in
11 Claim 23 and throughout the ‘275 Patent. Aerotel requests that special code be
12 interpreted as a “code used by the prepaid calling system,” while T-Mobile seeks a
13 significantly more limited definition of the term: “a unique number, other than an
14 identifier of a telephone subscriber or a telephone number, that the calling party inputs to
15 the special exchange each time he or she dials the special exchange to make a prepaid
16 call.” The parties therefore dispute the “specialness” of the code that is required. T-
17 Mobile suggests that the special code must be both “unique” and not an “identifier of a
18 telephone subscriber or a telephone number.” Aerotel would completely read “special”
19 out of the definition. Neither definition is accurate.

20 Claim 23 provides that the calling party is issued a “special code” when he or she
21 deposits a prepayment amount. Once the calling party has accessed the special exchange
22 the calling party inputs his or her “special code” and the number he or she is dialing to

1 request access. The calling party is only connected to the called party if the special
2 exchange verifies that the special code is “valid” and that there is sufficient prepayment
3 amount in the memory to cover the cost of the call. (‘275 Patent at 8:40-45.) Thus, the
4 code must be special enough to be identifiable but there is no limitation that it not be the
5 subscriber’s telephone number nor is there a requirement that it be “unique.” The court
6 concludes that the correct interpretation lies somewhere in the middle.

7 The court first declines to narrow the term to require that the special code be a
8 “unique code.” “Unique” is defined by *Webster’s Third New Int’l Dictionary* 1459
9 (2002) as “(1) one and only; single; sole.” *See Phillips*, 415 F.3d at 1322 (reaffirming the
10 appropriate use of dictionaries when construing claim terms). Nothing in the patent
11 indicates that a special code must be the one and only code; the patent only requires that
12 the code be “special” enough so that the special exchange can identify the credit amount
13 associated with the code. Yet, “special” may be considered synonymous with “unique.”
14 “Special” is defined by Webster’s as “(1) of a kind different from others; distinctive,
15 peculiar, or unique” or “(2) exceptional; extraordinary.” *Webster’s Third New Int’l*
16 *Dictionary* 1287. It is clear that the use of “special” in the ‘275 Patent falls under
17 definition (1) of Webster’s definition, as the one-of-a-kind element of the code is
18 necessary for the special exchange to identify the credit amount stored for that code. If a
19 “special” code were used more than once then the customer who deposited money into
20 the credit account could not be assured that no one else would use his or her credit
21 balance. Thus, the special code must be sufficiently special to connect only one credit
22 account to one code.

1 The court, however, does not find that interpreting “special code” to mean “unique
2 code” aids in understanding the meaning of the term. Unique and special are essentially
3 synonymous and thus the court remains “true to the claim language” and defines “special
4 code” to mean “special code.” *See Phillips*, 415 F.3d at 1316 (“The construction that
5 stays true to the claim language and most naturally aligns with the patent’s description of
6 the invention will be, in the end, the correct construction.”) Finally, the court declines to
7 graft onto the term “special code” the limitation that the code not be an identifier of a
8 telephone subscriber or a telephone number. This limitation is not supported by the plain
9 language of the ‘275 Patent.

10 **F. Inputting a Special Code and the Number of the Called Party**

11 Claim 23 also uses the term “inputting a special code and the number of the called
12 party.” The parties dispute whether the steps in Claim 23 must be read sequentially.
13 Aerotel proposes that, except for the definition of “special code,” this phrase as it is used
14 in the context of Claim 23 should be construed according to its plain meaning. Aerotel
15 contends that Claim 23 does not require that the special code be inputted each time a call
16 is made but only that it have been inputted before a call is made. Aerotel further argues
17 that the claim does not require that all the steps be performed in the order in which they
18 are recited. That is steps (a) through (d) do not need to be performed in a particular
19 order.

20 T-Mobile disagrees. It suggests that Claim 23 requires that the calling party input
21 the special code to the special exchange each time he or she dials the special exchange to
22

1 make a prepaid call. Thus, T-Mobile's construction is premised on the requirement that
2 steps (a) and (b) must be performed before step (d).

3 The dispute is whether Claim 23 requires the special code be inputted each time a
4 new call is made or whether the special code need only be inputted one time to make
5 multiple calls so long as the connection to the special exchange is not broken. Aerotel
6 suggests that the court read steps (a) through (d) out of order so that there is no
7 requirement that the special code be inputted before every call is made. While the '275
8 Patent also covers the situation where the calling party can stay connected to the special
9 exchange and make multiple calls, this process is explained in Claim 6 and is absent from
10 Claim 23. Logically, however, T-Mobile's construction requiring steps (a) and (b) be
11 performed before (d) is the most accurate.

12 The Federal Circuit offers guidance on when to read claim language sequentially.
13 It teaches that when the sequential nature of steps is apparent from the plain meaning of
14 the claim language, it is proper to construe the claim to require the steps be performed in
15 order even absent explicit sequential language in the claim or specification. *Mantech*
16 *Envtl. Corp. v. Hudson Envtl. Servs., Inc.*, 152 F.3d 1368, 1375-76 (Fed. Cir. 1998) (steps
17 of method claim had to be performed in order because each subsequent step referenced
18 something logically indicating prior step had been performed).

19 The court therefore reads Claim 23 sequentially (*i.e.*, the special exchange must be
20 dialed and then, once the calling party is connected, the calling party must enter the
21 special code and the number of the called party to complete the call). To read the steps in
22 any other order would be illogical. *See id.*

G. Connecting the Calling Party to the Called Party Only if the Special Code Inputted by the Calling Party is a Valid Special Code

Claim 23(e) contains the phrase “connecting the calling party to the called party only if the special code inputted by the calling party is a valid special code.” Aerotel requests that the court use the construction of “special code” as it proposed above and that the other words in this clause be construed according to their plain meaning. Aerotel adds, however, that in construing the term the court should determine that a call will not be connected unless the calling party has “previously” inputted a valid special code. T-Mobile argues that the phrase means: “completing a call only if the special code input by the calling party is verified as genuine at the time the call or sequence of consecutive calls is initiated.”

The distinction between Aerotel’s construction and T-Mobile’s construction is whether the calling party can disconnect from the special exchange and then make a subsequent call without inputting the special code again. The court finds T-Mobile’s construction to be consistent with the plain language of the claim when viewed in light of the patent specifications, and the prosecution history. Aerotel’s construction does not make sense. It leaves open the question of how the special exchange would know that the calling party’s special code is valid in subsequent calls if the calling party does not enter the special code each time he or she wishes to make a call or sequence of calls.

Claim 23(e) teaches that the calling party will be connected to the called party if the special code inputted by the calling party is valid. The prior step, Claim 23(d), requires that the special code and the number of the called party be inputted and then the

1 verification process of Claim 23(e) commences. Although not expressly set forth in
2 Claim 23, the '275 Patent permits a sequence of calls to occur once the special code has
3 been entered so long as the connection to the special exchange is not lost. Moreover,
4 Figure 1 of the '275 Patent sets forth a diagram depicting two options to terminate the
5 first call: either the user can terminate the call and then make another call or the user can
6 disconnect from the special exchange. This process in Figure 1 is explained in the
7 specifications as:

8 When the call is terminated by the user, and he still has credit, he is again
9 connected to normal dial tone, and he merely has to dial another call, if he
10 so desires. If he does not want to dial another call, then he returns the
11 handset to the hookswitch. * * * Thus the customer does not have to repeat
12 the entire connection back to the computer and have the validation
13 procedure repeated. He had [sic] already been checked and validated and
14 therefore he is connected to a normal dial tone. The process is repeated as
15 long as the credit remains.

16 ('275 Patent at 4:30-45.)

17 Contrary to Aerotel's notion that so long as the calling party has "previously"
18 entered a valid special code the call will be connected, the patent contemplates that the
19 code be entered each time the caller connects to the special exchange. For example, the
20 '275 Patent provides that after the caller dials the special exchange and inputs the special
21 code and number to call, the "computer at the special exchange checks the code and
22 registers the desired called number. If the code number is a genuine code with credit *i.e.*
23 valid . . . a regular dial tone is sent to the calling party station as he is connected to the
24 regular telephone system." ('275 Patent at 3:26-31; *see also id.* 4:19-25; *id.* 4:50-58, and
25 *id.* at Fig. 2 ("He then dials in the secret code . . . and the system checks to see if he has a

1 valid ticket number, if he does . . . he is visually or audibaly [sic] notified of the amount
2 of credit available in his code. . . . If he does not . . . he is notified that he has inserted an
3 invalid code.”); *id.* at 5:6-8 (“After verification of the code number and credit the calling
4 party is connected to the regular telephone system . . . ”); *id.* 5:32-38, 44-45 (“The calling
5 party dials the special charge number . . . The code number verifier looks into a section
6 of the memory . . . to verify that the code is valid. . . . When the number and credit are
7 verified, the calling party is then connected”)).

8 During prosecution, Aerotel explained that “[b]efore the calling party is connected
9 to the called party, the special code inputted by the calling party is validated in the sense
10 that the system determines whether the special code inputted by the calling party is a
11 valid special code. If this is the case, then the calling party is connected to the called
12 party” (Ex. A (1987 Amendment) at 5-6; *see also* Ex. C (2001 Reply) at 4 (“the
13 calling party inputs his/her special code. That code is checked by the computer to ensure
14 that it is a validly issued special code” before “the computer causes the call to be routed
15 to the destination station.”); Exs. B and F (2001 and 2002 Presentations) at 2-9).)

16 Aerotel’s construction leaves open the question of how the computer would verify the
17 special code if it is not entered each time the calling party connects to the special
18 exchange.

19 The court therefore construes the term (or phrase) “connecting the calling party to
20 the called party only if the special code inputted by the calling party is a valid special
21 code,” to mean that a call or a sequence of calls will not be connected unless the calling
22 party first enters a valid special code.

1 **H. Prepayment, Current Initial Prepayment, and Initial Prepayment Amount**

2 Aerotel requests that the court construe “current initial prepayment amount” and
 3 “prepayment amount” while T-Mobile similarly requests construction of these terms but
 4 includes “initial prepayment amount” as part of its proposed construction. The court
 5 agrees with T-Mobile that the three terms should be construed together. The terms are
 6 found in Claim 23(a), (e), (g) and (h). Aerotel proposes that the term “current initial
 7 prepayment amount” be interpreted to mean only the amount of the prepayment
 8 remaining at the time the call is being made and the “prepayment amount” as the
 9 monetary value associated with the special code. While T-Mobile would interpret the
 10 three terms to have essentially the same meaning: the terms mean the “monetary amount
 11 deposited by the user in exchange for (a) a special code, (b) the telephone number of a
 12 special exchange, and (c) a credit against the cost of future telephone calls equal to the
 13 monetary amount.” The court finds neither party’s construction persuasive. In order to
 14 give each term effect, the court construes the terms separately.

15 The term “prepayment amount” is used in the ‘275 Patent to refer to both the
 16 amount deposited to obtain the special code as well as the amount monitored when
 17 determining what remains in the calling party’s credit balance. (*See* Claim 1 of the ‘275
 18 Patent at 6:45-65.) The ‘275 Patent also refers to this amount as the “credit of the calling
 19 party.” (*Id.* at 7:40-45.) The distinction between the various monetary terms is most
 20 obvious in Claim 23. In step (a) of Claim 23, the term “prepayment amount” refers to the
 21 amount deposited to the credit account of the calling party. In steps (e) and (g) of Claim
 22 23, the term “current initial prepayment amount” seems to refer to the amount remaining

1 in the credit account of the calling party and is the amount that reflects the balance during
2 the “monitoring” of the call. The phrase “current initial prepayment amount” therefore
3 necessarily includes a temporal element to its use. *See Webster’s Third New Int’l*
4 *Dictionary* 340 (defining current as “(2) now going on; now in progress”). Finally, in
5 step (h) the term “initial prepayment” amount seems to refer to the amount of the credit
6 account balance when the call was initially connected.

7 In order to give each claim term effect, *see Cat Tech LLC v. TubeMaster, Inc.*, 528
8 F.3d 871, 885 (Fed. Cir. 2008), the court construes the terms differently. The court rests
9 its construction on the plain language of the ‘275 Patent. The term “prepayment
10 amount,” as used throughout the patent, refers to the original monetary amount deposited
11 in the user’s credit account. (*See* ‘275 Patent at 1:64; 6:45-67; 8:30-36.) The terms
12 “current initial prepayment amount” and “initial prepayment amount” appear only in
13 Claim 23. (*Id.* at 8:55-67.) As Claim 23 teaches the process from the deposit, through
14 the call, to the depletion of the prepayment amount, the court interprets “current initial
15 prepayment amount” to mean the monetary value as it is reduced during the call and, at
16 the end of the call, the running cost of the call is deducted from “initial prepayment
17 amount” meaning the cost of the call is deducted from the monetary value in the credit
18 account at the beginning of the call. The court finds that this process is distinguished
19 from the prepayment amount because if this is a second, third, or fourth call, the amount
20 in the credit balance at the beginning of the call will be less than the original prepayment
21 amount.
22

1 The court therefore construe “prepayment amount” to mean the monetary amount
2 associated with the original deposit to the credit account of the calling party. “Current
3 initial prepayment amount” means the running balance in the credit account of the user
4 during a call. Finally, “initial prepayment amount” refers to the monetary amount in the
5 credit account of the calling party at the time the call is commenced. This construction
6 gives each term effect and is consistent with the plain language of the ‘275 Patent.

7 **I. Monitoring the Running Cost of the Call**

8 The parties request construction of Claim 23(f)’s phrase “monitoring the running
9 cost of the call.” The crux of the dispute relates to whether the “monitoring” of the call is
10 done continuously or intermittently. According to Aerotel , the term “running cost”
11 means the incremental charges incurred for the continuing call. Monitoring the running
12 cost of the call, according to Aerotel, therefore means “to monitor by time which is
13 converted to money or monitoring by time which is a function of money.” Finally,
14 Aerotel proposes a construction that permits the monitoring to be done either
15 continuously or intermittently. T-Mobile argues that “monitoring the running cost of the
16 call” means continuously calculating the accumulated cost of the call. Essentially,
17 Aerotel asserts that the patent teaches that the call can be monitored either continuously
18 or intermittently while T-Mobile claims that the call must be monitored continuously to
19 be covered by Claim 23.

20 The court finds T-Mobile’s construction of the phrase persuasive. The plain
21 language of the patent, which provides that the call be disconnected “when the running
22 cost of the call exceeds the current initial prepayment amount,” requires that the running

1 cost of the call be monitored continuously. ('275 Patent at 8:50-54.) If the call were only
2 monitored intermittently the running cost of the call could exceed the current initial
3 prepayment amount before the next intermittent check is performed.

4 Aerotel counters that the patent teaches two forms of monitoring the call: (1) the
5 credit amount is converted to talk time and the call is timed against the available talk time
6 (for example, if the call were 25 cents per minute and there was a dollar in the credit
7 balance the computer would initially convert the dollar to 4 minutes of talk time and
8 disconnect the call after 4 minutes); or (2) the time rate of the call is used to compute the
9 cost of the call which is subtracted from the credit amount as the call progresses (in the
10 above-scenario, the computer would simply subtract 25 cents from the dollar each minute
11 that the call continues). Either way, however, the computer must be continually tracking
12 either the time or the credit in order to determine when to disconnect the call. Thus,
13 although "monitoring" may be read broadly to include "measuring continuously or at
14 intervals," *see McGraw-Hill Dictionary of Scientific and Technical Terms* (1974), in
15 order to satisfy the requirement that the call be disconnected when the cost of the call
16 exceeds the monetary value in the credit account, the call must be monitored
17 continuously.

18 Accordingly, the court construes the phrase "monitoring the running cost of the
19 call" to mean "continuously calculating the cost of the call."

20 **J. Deducting From the Initial Prepayment Amount the Running Cost of the Call**

21 Finally, the parties dispute the meaning of the phrase "deducting from the initial
22 prepayment amount the running cost of the call" found in Claim 23(h). Aerotel seeks the

1 following construction: the “initial prepayment amount” refers to the current initial
2 prepayment amount recited in step (e) and the “running cost” refers to the costs incurred
3 as a result of the call. The cost of each call, according the Aerotel, is then deducted from
4 the current initial prepayment amount. T-Mobile offers the following construction:
5 “Deducting from the initial prepayment amount the running cost of the call” means
6 reducing the initial prepayment amount by the running cost of the call at the end of the
7 call.

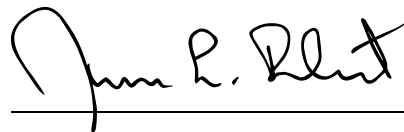
8 Aerotel’s construction of this phrase is not persuasive. Aerotel reads Claim 23(h)
9 as teaching that the cost of the call can be deducted at the end of the call or during the
10 call. T-Mobile on the other hand suggests that this step be read sequentially and, thus,
11 the deduction of the cost of the call must occur at the end of the call. T-Mobile’s position
12 is both logical and remains true to the plain language of the patent. If the deduction of
13 the cost of the call occurred during the call then the step (h) would be superfluous, or, at a
14 minimum, it would have to qualify that, if the amount had not previously been deducted,
15 then it would be deducted at the end of the call. No such qualifying language is
16 contained in Claim 23 and therefore the court adopts T-Mobile’s construction of this
17 phrase. The phrase means reducing the initial prepayment amount by the running cost of
18 the call at the end of the call.

IV. CONCLUSION

Now that claim construction has concluded, the court sets a trial date of **August 24, 2010**, and amends its Minute Order Setting Trial Dates and Related Dates as follows:

Reports from expert witnesses under FRCP 26(a)(2)	01/25/2010
Rebuttal expert reports due by	02/25/2010
Motions related to discovery due by	03/20/2010
Discovery completed by	04/26/2010
All dispositive motions must be filed by	05/26/2010
Settlement conference per CR 39.1(c)(2) held by	06/25/2010
Mediation per CR 39.1(c)(3) held by	07/27/2010
All motions in limine must be filed by	08/03/2010
Agreed pretrial order due by	08/05/2010
Pretrial conference to be held at 02:00 PM	08/09/2010
Trial briefs, voir dire questions, jury instructions due by	08/16/2010
Length of Jury Trial: 4–5 days	08/24/2010

Dated this 23rd day of December, 2009.



JAMES L. ROBART
United States District Judge